

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all previous versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended): A method of forming an in-situ filter for controlling flowback of proppants injected into a fracture of a subterranean formation comprising the step of injecting a spring ~~an expandable member~~ into the fracture.

Claim 2 (Currently Amended): The method of forming an in-situ filter according to claim 1 further comprising the steps of compressing the spring ~~expandable member~~ and inserting it into a mass of a fibrous network.

Claim 3 (Currently Amended): The method of forming an in-situ filter according to claim 2 further comprising the step of placing the compressed spring ~~expandable member~~ and fibrous network into a mold cavity.

Claim 4 (Original): The method of forming an in-situ filter according to claim 3 further comprising the step of injecting an aqueous soluble mixture into the mold cavity.

Claim 5 (Currently Amended): The method of forming an in-situ filter according to claim 4 further comprising the step of curing the aqueous soluble mixture until it forms a solid structure, which encapsulates the compressed spring ~~expandable member~~ and fibrous network.

Claim 6 (Currently Amended): The method of forming an in-situ filter according to claim 5 further comprising the step of removing the solid structure containing the compressed spring ~~expandable member~~ and fibrous network from the mold cavity.

Claim 7 (Currently Amended): The method of forming an in-situ filter according to claim 6 further comprising the step of mixing the solid structure containing the compressed spring ~~expandable member~~ and fibrous network with a proppant slurry.

Claim 8 (Currently Amended): The method of forming an in-situ filter according to claim 7 further comprising the step of injecting the mixture of the solid structure containing the

compressed spring expandable member and fibrous network and the proppant slurry into the fracture.

Claim 9 (Currently Amended): The method of forming an in-situ filter according to claim 8 further comprising the step of dissolving the soluble mixture forming the solid structure after the spring expandable member has been injected into the fracture thereby releasing the spring expandable member from the compressed state, which together with the fibrous network form the in-situ filter.

Claim 10 (Currently Amended): An in-situ filter for controlling flowback of proppants formed in a fracture of a subterranean formation comprising a network of fibrous material and a plurality of interspersed springs expandable members.

Claim 11 (Original): The in-situ filter according to claim 10 wherein the fibrous network comprises materials selected from the group consisting of stainless steel wool, a composite fibrous sponge and combinations thereof.

Claim 12 (Currently Amended): The in-situ filter according to claim 10 wherein the springs are expandable members comprise springs selected from the group consisting of a torsion spring, a compression spring, an open coil spring, a helical spring and a clock spring.

Claim 13 (Original): The in-situ filter according to claim 12 wherein the springs are clock springs and a plurality of elongated members are attached at one end to each clock spring.

Claim 14 (Original): The in-situ filter according to claim 13 wherein an other end of the plurality of elongated members are anchored by, and attached to, a ball.

Claim 15 (Original): The in-situ filter according to claim 14 further comprising a flexible filter sheath attached to each spring and associated elongated members.

Claim 16 (Currently Amended): The in-situ filter according to claim 13 wherein the springs expandable members are formed of a material selected from the group consisting of comprise at least one of the following: a stainless steel wire and or a composite polymer.

Claim 17 (Original): The in-situ filter according to claim 15 wherein the flexible filter sheath is formed of a stainless woven wire cloth having a mesh size greater than 60-mesh.

Claim 18 (Currently Amended): A system for controlling flowback of proppants injected into a fracture of a subterranean formation comprising a plurality of encapsulated compressed springs ~~expandable members~~ placed in the fracture adjacent to a wellbore formed within the subterranean formation.

Claim 19 (Currently Amended): The system for controlling flowback of proppants according to claim 18 wherein a mass of fibrous material is encapsulated with the compressed springs ~~expandable members~~.

Claim 20 (Currently Amended): The system for controlling flowback of proppants according to claim 19 wherein an aqueous soluble mixture comprising a filler material is encapsulated with the compressed springs ~~expandable members~~.

Claim 21 (Original): The system for controlling flowback of proppants according to claim 20 wherein the filler material comprises glycerin, wintergreen oil, oxyzolidine oil and water.

Claim 22 (Original): The system for controlling flowback of proppants according to claim 20 wherein the aqueous soluble mixture further comprises an adhesive.

Claim 23 (Original): The system for controlling flowback of proppants according to claim 22 wherein the adhesive comprises collagen.

Claim 24 (Currently Amended): The system for controlling flowback of proppants according to claim 20 wherein the aqueous soluble mixture dissolves under downhole conditions causing the compressed springs ~~expandable members~~ to be released from the encapsulated state and expand to form an in-situ filter in the fracture adjacent to the wellbore.

Claim 25 (Original): The system for controlling flowback of proppants according to claim 24 wherein the aqueous soluble mixture dissolves in approximately 3 to 8 hours.

Claim 26 (Original): The system for controlling flowback of proppants according to claim 24 wherein the aqueous soluble mixture dissolves in temperatures greater than approximately 55 °C.

Claim 27 (Currently Amended): The system for controlling flowback of proppants according to claim 18 wherein each of the compressed springs ~~expandable members~~ comprises at least one spring selected from the group consisting of a torsion spring, a compression spring, an open coil spring, a helical spring and a clock spring.

Claim 28 (Original): The system for controlling flowback of proppants according to claim 27 wherein the springs are clock springs and a plurality of elongated members are attached at one end to each clock spring.

Claim 29 (Original): The system for controlling flowback of proppants according to claim 28 wherein the other end of the plurality of elongated members are anchored by, and attached to, a ball.

Claim 30 (Original): The system for controlling flowback of proppants according to claim 29 further comprising a flexible filter sheath attached to each spring and associated elongated members.

Claim 31 (Original): The system for controlling flowback of proppants according to claim 28 wherein the elongated members are formed of a material selected from the group of a stainless steel wire and a composite polymer.

Claim 32 (Original): The system for controlling flowback of proppants according to claim 30 wherein the flexible filter sheath is formed of a stainless woven wire cloth having a mesh size greater than 60-mesh.